



615 W. 131 STREET, NEW YORK, N.Y. 10027

RODENT TEST CHAMBER MODEL A-110/D-700

The A-110 Rodent Test Chamber and the D-700 Feeder provide a low cost student laboratory unit of unusual flexibility.

The test chamber has two Lucite panels and a hinged, ventilated Lucite top (with a retaining latch). The internal dimensions (above the grid floor composed of 16 stainless steel bars $5/32$ " in diameter, located $9/16$ " on center) are $7\ 9/16$ "H x $9\ 1/4$ "W x 8"D. The overall dimensions are $11\ 1/2$ "H x $23\ 3/4$ "W x $11\ 1/4$ "D. The end walls and droppings pan are iridized aluminum. A food tray, water bottle, cue light, and pedal lever are provided and the feeder is supplied with a 1:1 disc for P. J. Noyes 4 mm, 45 mg pellets. The unit is wired and mounted on a plywood base.

The piggy-back control unit contains a 2-amp, 28 VDC power supply; a 3-digit, manually reset response counter permanently wired to the pedal lever; a silent three-position (center-off) switch wired to the cue light (adjustable for three brightness levels); and a second three-position toggle switch (center-off) which controls a variable intensity shock source consisting of 115 VAC in series with 20K ohms fixed plus 100K ohms adjustable - covering the range of 0.96 MA to 5.75 MA). Each switch is spring loaded in one direction and self-holding in the other. An eight wire, manual shock scrambler or automatic shock scrambler is optional.

An auxilliary output is provided from the pedal lever and a pair of power supply terminals (28 VDC, 2-amps) are provided to operate external equipment. An A.C. power switch, fuse, and pilot light are also provided.

A special group of controls is provided which consists of a separate 3-digit, manually reset reinforcement counter; two additional output binding posts (reinforcement); a switch (marked "series", "parallel"); a panel jack; and a pushbutton switch on a six foot cable which is terminated in a plug to mate the panel jack. (This pushbutton may be operated while viewing the subject from any convenient position.)

The reinforcement counter accumulates the number of times an output is provided at the reinforcement output terminals (to operate a pellet dispenser or optional liquid feeder). If the control switch is in the parallel position, a reinforcement output is provided (and counted) every time the pedal is pressed or the pushbutton switch on the plug-in extension cord is pressed. If either

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the pedal or pushbutton is pressed, it inhibits reinforcement commands from the other source for the duration it is held down. Therefore, the number of reinforcements is always greater than or equal to the number of responses unless a large number of responses occur while a reinforcement is being manually delivered. This is a convenient mode of operation for hand shaping an animal.

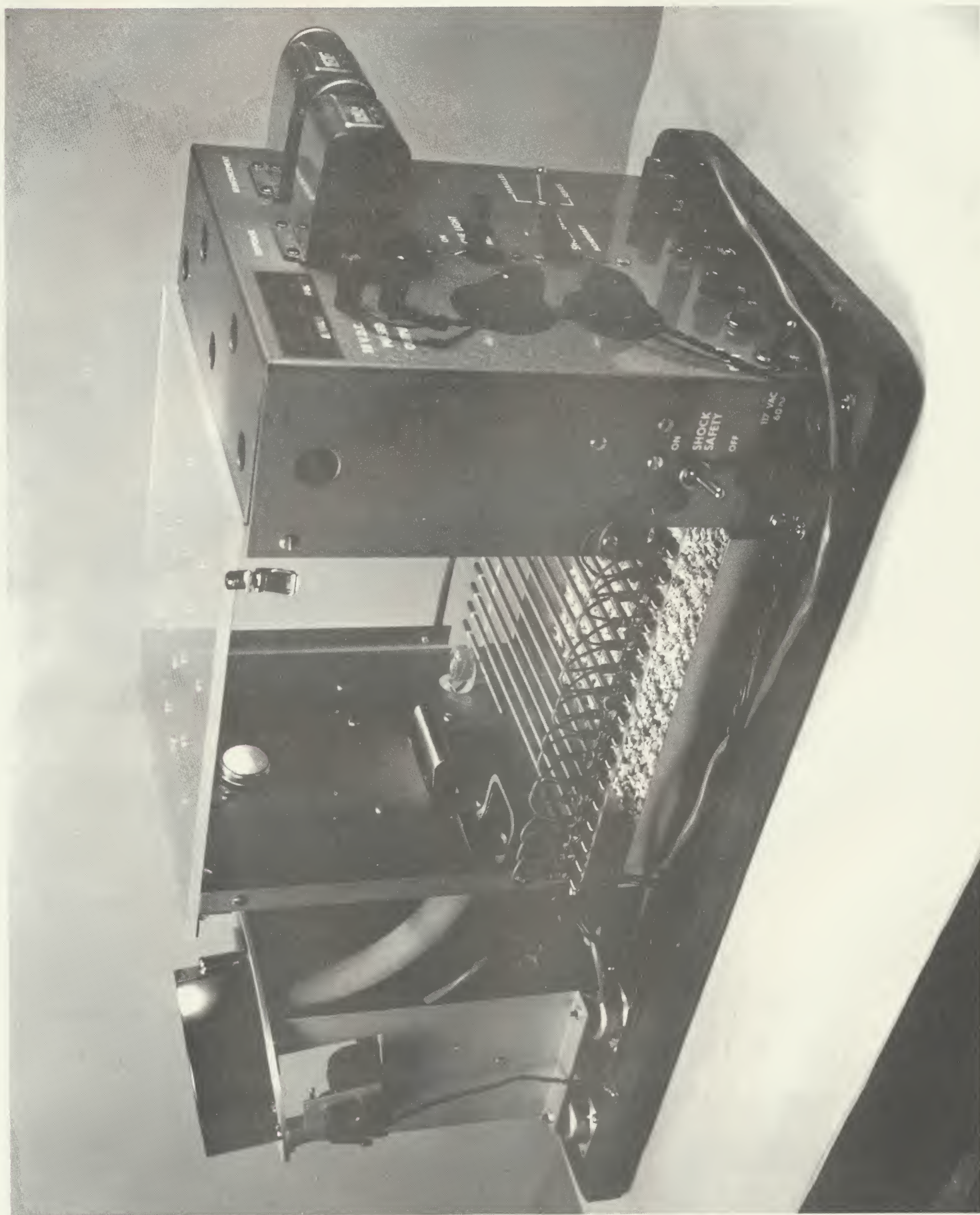
In the series position, the reinforcement output is provided (and counted) only when both the pedal lever and the manual pushbutton are pressed simultaneously. Therefore, the number of reinforcements is always less than or equal to the number of responses. The series mode of operation permits a student, by watching the response counter, to manually control fixed or variable ratio schedules of reinforcement. With the addition of a timer (a watch with a sweep second hand would be sufficient), fixed or variable interval programs could also be generated.

This test cage is available with liquid reinforcement (specify liquid feeder).

Shipping weight is approximately 20 pounds.

Prices: (f.o.b. New York City)

A-110 (without feeder)	\$ 217.00
A-110/D-700 (with feeder)	305.00
A-110/L-11 (with solenoid valve liquid dispenser)	305.00
MS - manual scrambler option as in A-110/D-700-MS	30.00 additional
AS - automatic solid state scrambler option as in A-110/L-11-AS	100.00 additional



MODEL A-115 STUDENT LABORATORY TEST CHAMBER FOR RAT

For simple and sophisticated student laboratory operant work, we now offer the Model A-115 Test Chamber with the following features:

- 1) One response bar.
- 2) One cue lamp, located above the response bar.
- 3) One automatically operated pellet or water dispenser (optional).
- 4) "Semi-automatic", adjustable-intensity, manually scrambled shock applied to the Test Chamber floor (sixteen stainless steel grid-bars).
- 5) Lucite sides and top lid for excellent visibility and student observation.
- 6) A flat wood baseplate, which supports the Test Chamber and dispenser making the entire assembly suitable for table top use.
- 7) A slide-out droppings pan (under the grid-bar floor).
- 8) A hand-held control box permanently connected to the Test Chamber via a six foot cable.

The student "cradles" the separate hand-held control box while observing the rat and controls the test environment by operating switches on the box. The box has three counters which automatically register total responses, reinforcing responses (SD), and non-reinforcing responses (SΔ). There are two alternate and mutually exclusive "states" of the control equipment and the test environment: SΔ interval (the rat's bar-press responses have no effect on reinforcement), the SD interval (the rat's first response gives one reward and/or stops the shock, stops the SD interval, and starts a new SΔ interval).

Each SD interval is started by the student pressing a "Start SD" pushbutton on the box. Once the student has started an SD interval, it persists until the subject's first (SD) response. (The student has a "Stop SD" pushbutton in case the rat does not respond in a reasonable amount of time).

The stimulus or reinforcement to be presented during the SD interval is selected by three manual toggle switches on the control box. Typically, this selection is made before the start of the experiment and remains the same. Alternately, the selection may be varied for each SD interval by changing the switches during the previous SΔ interval. In any event, the selected stimuli and/or reinforcement is presented only during SD intervals.

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One three-position toggle switch is provided for the cue lamp above the response lever ("SD", "off", "SΔ"). A second three-position toggle switch is provided for positive reinforcement ("SD", "off", "CRF"). On CRF, every bar-press gives a reinforcement regardless of SD-SΔ status. The third three-position toggle switch is for scrambled shock ("SD", "off", "manual"). When on "manual", this switch enables the student to shock the rat by pressing a separate "manual-shock" push-button, regardless of SD-SΔ status.

There are two additional pushbuttons: The "manual" food push-button delivers one positive reinforcement per button-press regardless of SD-SΔ status; the "manual" lamp pushbutton illuminates the cue lamp above the response lever regardless of SD-SΔ status.

There are three manual toggle switches labelled "scrambler" which change the polarity of the grid-bar shock to prevent the rat from learning to stand on bars of the same polarity.

An adjustable shock-intensity control knob, and pilot lights to indicate the selection and the occurrence of environmental events complete the control box.

The Model A-115 Test Chamber and its control box is a completely self-contained system including 24-28 VDC power.

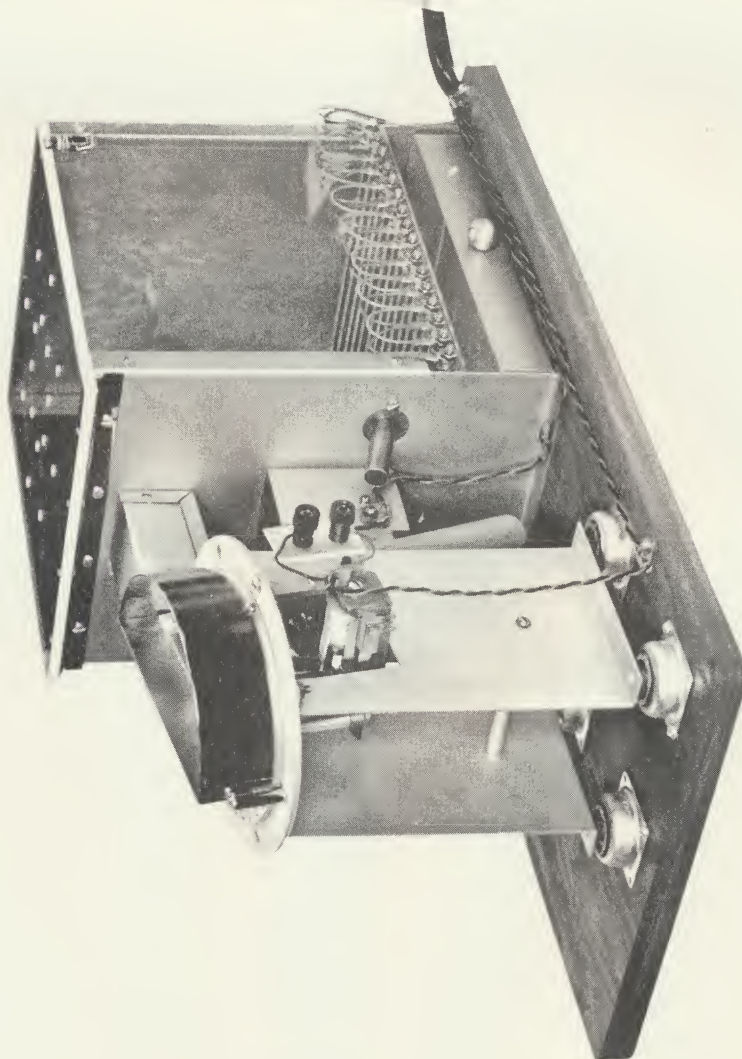
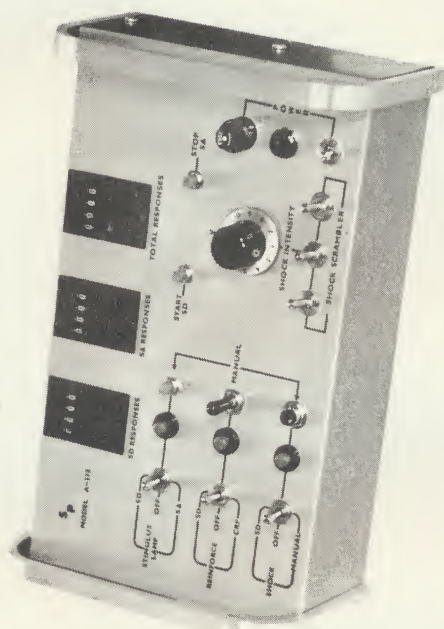
The Model A-115 Test Chamber does not include any equipment for automatically starting each "SD interval". The student himself must manually start each SD interval on the basis of a fixed or variable interval or ratio schedule, DRL schedule, DRH schedule, etc. by using the response counters on the control box, and/or the sweep-second hand on clocks or stopwatches available in most laboratories.

The Model A-115 may be operated in conjunction with external tape programmers (automatic VI, FI, VR, FR), timers (automatic FI, DRH, DRL, Shock escape), and recorders. Such external equipment, if any, must be of the conventional 24-24 VDC form (the style which mounts on "power rods" and utilizes "snap leads"). Scientific Prototype Reed Relay Equipment is ideal for this purpose.

We fully believe the Model A-115 to be the most advanced medium priced, student laboratory test chamber presently available. Your further inquiries are welcomed.

Price: With solenoid valve liquid dispenser
or with D-70 Pellet Dispenser \$445.00

f.o.b., New York City



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SCIENTIFIC PROTOTYPE is in the process of completing a revised catalog of scientific and behavioral research equipment which is part of our comprehensive program to provide you with complete and up-to-date information on our equipment. The new SCIENTIFIC PROTOTYPE Equipment Catalog will cover such units as our:

- Student Rodent Kits
- Rodent Test Cages, basic and modified
- Pidgeon Test Cages, basic and modified
- Standard Pedal Levers
- Pidgeon Pecking Keys
- Retractable Pedal Levers
- Pellet Dispensers
- Liquid Dispensers
- Soundproof Chambers
- Cumulative Recorders and Accessories
- Event Recorders
- Power Supplies
- Noise Generators
- Power Amplifiers
- Transistorized Interval Timers
- Transistorized Audio Threshold Detectors ("Voice Keys")
- Two Channel Tachistoscopes
- Three Channel Tachistoscopes
- Six Channel Tachistoscopes (Binocular)
- Time Interval Generators
- etc.

We regret the delay but we believe the result will be well worth the wait. As soon as the catalog is available, we will make sure you receive your copy. We are looking forward to your response to it and to assisting you with your questions and equipment requirements.